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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,885	03/21/2001	Ola Hugosson	3782-0111P	1137

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EXAMINER	
PATEL, KANJIBHAI B	
ART UNIT	**PAPER NUMBER**
2625	7

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/812,885	HUGOSSON ET AL.	
	Examiner	Art Unit	
	Kanji Patel	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in SWEDEN on 3/21/00. It is noted, however, that applicant has not filed a certified copy of the application as required by 35 U.S.C. 119(b).

Drawings

2. Drawings are objected by the Draftsperson (see attached PTO Form 948).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Schuessler et al. (herein after referred to Schuessler) (US 6,047,892).

For claims 1, 10, Schuessler discloses a method for storage of non-sequential data, comprising:

coding the non-sequential data to a coding pattern (column 6, lines 50-62; barcode is printed or stored on a printing material having a row/column matrix corresponds to a non-sequential data), the coding pattern including at least one sequence (at least a set of codewords consists of three clusters of codewords provides sequence) with symbols (each codeword is represented by symbols of bars and spaces; column 6, lines 59-66) which have the characteristic that an arbitrary subsequence (column 6, lines 62-66; each cluster of codewords provides a subsequence having a full character set) of a predetermined magnitude of the sequence unambiguously defines a position of the subsequence in the sequence ; and

reproducing the coding pattern on a product (column 51-54; barcode is printed on any paper product).

For claims 2, 11, Schuessler discloses the method further comprising:

converting the non-sequential data into a set of data values having a pattern arranged so as to comprise sequence portions of said at least one sequence in a coding pattern (figure 3 provides sequences of 1-52 coding patterns), said sequence portions (bar and space represents a portion of the sequence) being at least of the same magnitude as

the subsequences (each code in every sequence of code pattern provides subsequence as shown in figure 3) of a predetermined magnitude, so that each of the data values is coded by a group each of at least two sequence portions in the coding pattern (see column 7 line 52 to column 8 line 5).

For claim 3, Schuessler discloses the method further comprising: converting the non-sequential data (at least column 51-59) into a set of data values (in figure 3 all data patterns are represented by data values, for example patteren number 1 has 2 1 1 3 1 1 data values) having a pattern arranged so as to comprise sequence portions (each data value is a portion of the sequence of the pattern as shown in figure 3) of said at least one sequence in a coding pattern (1-52 are coding patterns in figure 3), said sequence portions being of the same magnitude as the subsequences of a predetermined magnitude, so that each of the data values is coded by one sequence portion in the coding pattern (column 7, lines 1-40).

For claims 4,12 ,Schuessler discloses the method wherein the non-sequential data is coded with only one sequence (in figure 1 data pattern 1 provides only one sequence), wherein the position of a subsequence (each position of bar and space provides a postion of a subsequence as shown in figure 3) in the sequences constitutes a sequence value (value of the full data pattern provides sequence value), and wherein a relationship between the sequence values from different sequence portions defines the data values.

For claims 5, 13, Schuessler discloses the method wherein each of the data values is defined by a difference between the sequence values for two subsequences

from different sequence portions (as shown in figure 3 each data pattern has different value in the sequence).

For claims 6, 14, Schuessler discloses the method wherein the sequence portions are juxtaposed in the coding pattern comprising a matrix (at least in column 7, lines 51-59; row/column matrix of bar codes are juxtaposed) in such manner that each of the data values is defined by a difference between the sequence values of two adjoining subsequences from corresponding parts of the sequence portions in the coding pattern (figure 3; column 7 line 52 to column 8 line 5).

For claims 7,15, Schuessler discloses the method wherein the sequence portions also code at least part of a position value which defines a serial number of the sequence portion (in figure 3, pattern numbers 1-52 provide serial numbers).

For claims 8, 16, Schuessler discloses the method wherein the non-sequential data comprises characters (column 6, lines 62-66) and wherein the characters are converted into data values.

For claims 9, 17 and 22, Schuessler discloses the method wherein the non-sequential product comprises at least one of the following: a sheet of paper, a book cover, a page of a book, a magazine cover, a magazine page, a newspaper page, and a bulletin board (column 6, lines 50-62; barcode is printed or stored on a printing material having a row/column matrix corresponds to a non-sequential data; see also column 16, lines 50-53).

For claim 18, see the rejection of claim 1 and 10 above. The system is provided by Schuessler at least in figure 9 wherein a paper is used as a product as described in column 16, lines 50-56. The memory 100 in figure 9 is used for storage.

For claim 19, Schuessler discloses the system wherein the coding pattern codes a set of data values (figure 3), each of the data values coding a group of sequence portions consisting of at least two sequence portions (column 8, lines 1-5; subset corresponds to a sequence portion).

For claim 20, Schuessler discloses the system wherein the symbols consist of markings, the size of the markings defining a value of the symbol (column 7, lines 60-67).

For claims 21 and 32, Schuessler discloses the system wherein each of the symbols comprises a raster point and a marking, the value of each symbol being indicated by a position of said marking in relation to the raster point (column 7, lines 60-67).

For claim 23, Schuessler discloses the system wherein the coding pattern codes text (column 3, lines 54-58; column 5 line 63 to column 6 line 2; column 6, lines 60-64);

For claim 24, Schuessler discloses the system wherein the coding pattern codes a command (column 3, lines 60-67; start and stop codes provide command for starting and ending coding pattern).

For claim 25, see the rejection of at least claims 1, 10 and 18 above. An image sensor is provided by Schuessler in column 16, line 55.

For claim 27 and 35, Schuessler discloses the apparatus further comprising a loudspeaker adapted to transmit sounds corresponding to the data (figures 9-10; inherent in the bar code reading system).

For claim 28, Schuessler discloses the apparatus wherein the processor (120 in figure 9; column 16, line 56) is further configured to convert the symbols into subsequences with values (figures 5a-5b; at least subsets provide subsequences), to convert the subsequences with values into sequence values (in figure 3 data patters provide sequences), to calculate difference values as the difference between the sequence values (in figure 3 for example sequence values for data pattern 1is provided by 2 1 1 3 1 1), to convert the difference values into data values, and to convert the data values into data.

For claim 29, Schuessler discloses the apparatus wherein at least one of the difference values is used to determine relative positions of the subsequences (column 9, lines 58-63).

For claim 26 and 34 and 37, Schuessler discloses the apparatus further comprising a display adapted to show the data (149 in figures 10 is a display).

For claim 30, Schuessler discloses the apparatus wherein the relative position of the subsequences is used to decide whether data corresponding to a data value has been previously recorded (column 9, lines 44-57).

For claim 31, see the rejection of claims 1, 10, 18 and 25 above.

For claim 33, see the rejection of at least claims 1, 10, 18 and 25 above.

For claim 36, see the rejection of at least claims 1, 10, 18 and 25 above.

For claim 38, see the rejection of at least claims 1, 10, 18 and 25 above.

For claim 39, see the rejection of at least claims 1, 10, 18 and 25 above.

For claim 40, see the rejection of at least claims 1, 10, 18 and 25 above.

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoshida (US 5,343,031) discloses a method of decoding a two-dimensional code symbol mark.

Comeford et al. (US 5,303,312) disclose a handwriting recognition by character template.

Priddy et al. (US 5,329,107) disclose a dynamically variable machine readable binary code and method for reading and producing thereof.

Tanaka et al. (US 5,912,869) disclose a recording medium data transmission method and apparatus and data reproduction method and apparatus.

Wei (US 6,516,037 b1) discloses a multilevel coding with time diversity.

Lazzouni et al. (US 5,652,412) disclose a pen and paper information recording system.

Brooks (US 5,434,371) discloses a hand-held electronic writing tool.

Sekendur (US 5,852,434) discloses an absolute optical position determination.

Contact information

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **Kanji Patel** whose telephone number is (703) 305 4011. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 6:30 p.m. Friday off.

If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, **Mehta , Bhavesh**, can be reached on (703) 308- 5246.

Any inquiry of general nature or relating to the status of this application should be directed to the **Group receptionist** whose telephone number is (703) 305-3800. The

Fax number for this group is (703) 872-9306.

KR Patel

Kanji Patel
Patent Examiner
Group Art Unit2625
March 19, 2004